

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A display apparatus comprising:

    a data writing section that includes a data line and a first switching section which controls writing of electric potential that is supplied through the data line, and writes an electric potential corresponding to an emission brightness; and

    a threshold voltage detecting section that includes

a driver transistor which controls current according to the electric potential written by the data writing section;

        a second switching section which controls conduction between a gate electrode and a drain electrode of a ~~driver element which controls current according to the electric potential written by the data writing section and which has a thin film transistor~~ the driver transistor; and

        a ~~current~~ current-controlled light emitting element that ~~displays~~ emits light with a brightness corresponding to a current flowing therethrough, and ~~is capable of~~ functions as a capacitor for supplying electric charge to the drain electrode or a source electrode of the driver element transistor, ~~as a capacitor that stores electric charge, and~~ wherein the threshold voltage detecting section detects a threshold voltage of the driver element transistor.

2. (CURRENTLY AMENDED) The display apparatus according to claim 1, wherein the threshold voltage detecting section detects the threshold voltage ~~of the driver element, on the driver element whose gate electrode and drain electrode are shorted by the second switching section~~, by OFF state in which a potential difference between the gate and ~~the source electrodes of the~~ driver transistor whose gate electrode and drain electrode are shorted by the second switching section drops to the threshold voltage by a reduction in the electric charge stored in the current-controlled light emitting element after the driver element transistor is put ON based on a potential difference between the gate and the source electrodes caused by the electric charge stored ~~in the current light emitting element~~.

3. (CURRENTLY AMENDED) The display apparatus according to claim 1, wherein an electric potential applied to the driver element transistor during emission of light is a sum of the threshold voltage ~~of the driver element~~ detected by the threshold voltage detecting section and the electric potential written by the data writing section.

4. (CURRENTLY AMENDED) The display apparatus according to claim 1, wherein the threshold voltage detecting section includes a power-supply line that supplies current by applying voltage in a

forward direction to the ~~current~~ current-controlled light emitting element during emission of light, and ~~can store that~~ stores electric charge in the current light emitting element by applying voltage in a reverse direction to the ~~current~~ current-controlled light emitting element.

5. (ORIGINAL) The display apparatus according to claim 1, further comprising a first scan line for controlling a drive state of the first switching section.

6. (CURRENTLY AMENDED) The display apparatus according to claim 1, wherein the ~~current~~ current-controlled light emitting element is an organic electroluminescence element.

7. (ORIGINAL) The display apparatus according to claim 1, wherein the data writing section further includes a capacitor which holds an electric potential supplied from the data line.

8. (ORIGINAL) The display apparatus according to claim 1, further comprising a third switching section that is provided between the data writing section and the threshold voltage detecting section, and controls electric conduction between the data writing section and the threshold voltage detecting section.

9. (CURRENTLY AMENDED) The display apparatus according to claim 8, further comprising a second scan line for controlling a drive state of the second switching section and a drive state of the third switching section, wherein

~~each of the second switching section and the third switching section includes a thin film transistor whose gate electrode is connected to the second scan line and which has different conductivity type of channel layer from each other~~ the second switching section includes a first transistor whose gate electrode is connected to the second scan line and which has a first channel layer with a first conductivity type, and

the third switching section includes a second transistor whose gate electrode is connected to the second scan line and which has a second channel layer with a second conductivity type opposite to the first conductivity type.

10. (CURRENTLY AMENDED) The display apparatus according to claim 8, wherein each of the second switching section and the third switching section has a ~~thin film~~ transistor with a same conductivity type of channel layer, and

the drive state of the second switching section and the drive state of the third switching section are controlled through different scan lines.

11. (ORIGINAL) The display apparatus according to claim 1, further comprising:

a capacitor that is disposed between the data writing section and the threshold voltage detecting section and includes a first electrode electrically connected to the data writing section and a second electrode electrically connected to the threshold voltage detecting section; and

a fourth switching section that is electrically connected to the first electrode and controls electric potential of the first electrode.

12. (ORIGINAL) The display apparatus according to claim 11, wherein the fourth switching section, when in ON state, while maintaining an electric potential difference between the first electrode and the second electrode, causes a same amount and different polarity of an electric charge as that held in the first electrode to the second electrode and eliminates an electric charge held in the first electrode, and when in OFF state, continues to hold the electric charge without transferring the electric charge held in the capacitor.

13. (CURRENTLY AMENDED) The display apparatus according to claim 11, further comprising a third scan line for controlling a drive state of the second switching section and a drive state of the

fourth switching section, wherein each of the second switching section and the fourth switching section includes a thin film transistor whose gate electrode is connected to the third scan line and which has different conductivity type of channel layer from each other the second switching section includes a first transistor whose gate electrode is connected to the third scan line and which has a first channel layer with a first conductivity type, and

the fourth switching section includes a second transistor whose gate electrode is connected to the third scan line and which has a second channel layer with a second conductivity type opposite to the first conductivity type.

14. (CURRENTLY AMENDED) The display apparatus according to claim 11, wherein each of the second switching section and the fourth switching section has a ~~thin film~~ transistor with a same conductivity type of channel layer, and

the drive state of the second switching section and the drive state of the fourth switching section are controlled through different scan lines.

15. (CURRENTLY AMENDED) The display apparatus according to claim 1, wherein the second switching section includes a first ~~thin film~~ transistor connected to a gate electrode of the driver

element transistor and a second thin film transistor connected to the drain electrode of the element transistor.

16. (CURRENTLY AMENDED) The display apparatus according to claim 15, wherein ~~the second thin film transistor is put ON together with the first thin film transistor to short the gate electrode and the drain electrode of the driver element and holds the threshold voltage detected by OFF state after the threshold voltage is detected~~ the threshold voltage detecting section detects the threshold voltage by OFF state in which a potential difference between the gate and source electrodes of the driver transistor whose gate electrode and drain electrode are shorted by the first and second transistors which are in ON state drops to the threshold voltage by a reduction in the electric charge stored in the current-controlled light emitting element after the driver transistor is put ON based on a potential difference between the gate and the source electrodes caused by the electric charge stored, and

the second transistor holds the threshold voltage detected.

17. (CURRENTLY AMENDED) The display apparatus according to claim 1, further comprising a capacitor that is disposed between the data writing section and the threshold voltage detecting section and includes a first electrode electrically connected to the data

writing section and a second electrode electrically connected to the threshold voltage detecting section, wherein

the data line supplies a reference electric potential during the emission ~~of light~~, during detection of the threshold voltage, and during storing of the electric charge in the ~~current~~ current-controlled light emitting element, and

the first switching section causes electric conduction between the data line and the first electrode during the emission ~~of light~~, during ~~the detection of threshold voltage of the driver element by the threshold voltage detecting section~~, and during ~~the storing of electric charge by the current light emitting element~~.

18. (CURRENTLY AMENDED) The display apparatus according to claim 1, wherein all the current light emitting elements display light simultaneously and display one screen simultaneously A display apparatus comprising a plurality of pixel circuits, each of the pixel circuits including

a data writing section that includes a data line and a first switching section which controls writing of electric potential that is supplied through the data line, and writes an electric potential corresponding to an emission brightness; and

a threshold voltage detecting section that includes

a driver transistor which controls current according to the electric potential written by the data writing section;

a second switching section which controls conduction between a gate electrode and a drain electrode of the driver transistor; and

a current-controlled light emitting element that emits light with a brightness corresponding to a current flowing therethrough, and functions as a capacitor for supplying electric charge to the drain electrode or a source electrode of the driver transistor, wherein

the threshold voltage detecting section detects a threshold voltage of the driver transistor, and

the current-controlled light emitting element emits to display one screen simultaneously among all the pixel circuits.

19. (CURRENTLY AMENDED) The display apparatus according to claim 1, wherein electric charge is stored simultaneously in all the current light emitting elements and all the second switching sections short the gate electrode and the drain electrode of the driver element simultaneously A display apparatus comprising a plurality of pixel circuits, each of the pixel circuits including a data writing section that includes a data line and a first switching section which controls writing of electric potential

that is supplied through the data line, and writes an electric potential corresponding to an emission brightness; and

a threshold voltage detecting section that includes

a driver transistor which controls current according to the electric potential written by the data writing section;

a second switching section which controls conduction between a gate electrode and a drain electrode of the driver transistor; and

a current-controlled light emitting element that emits light with a brightness corresponding to a current flowing therethrough, and functions as a capacitor for supplying electric charge to the drain electrode or a source electrode of the driver transistor, wherein

the threshold voltage detecting section detects a threshold voltage of the driver transistor,

the electric charge is stored in the current-controlled light emitting element simultaneously among all the pixel circuits, and

the second switching section shorts the gate electrode and the drain electrode of the driver transistor simultaneously among all the pixel circuits.